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DSP, said memory is a single chip dual-ported RAM or a two chips RAM, said computer bus is an ISA bus or a PCI bus.

4. The remote video surveillance server in accordance with claim 1, wherein said channel transceiver chip is an E1 or a DDN or an ISDN transceiver chip, said programmable device is a CPLD or a FPGA or a DSP, said memory is a single chip dual-ported RAM or a two chips RAM, said computer bus is an ISA bus or a PCI bus.

5. A remote video surveillance server comprising:

a number of channel interfaces units, each of the channel interfaces units coupled to a field terminal and receiving data from the field terminal, wherein each of the channel interfaces units comprises at least a channel transceiver to communicate with the field terminal and buffer the data in a memory,

a network interface coupled to a data network; and

an information process kernel coupled between the channel interfaces units and the network interface; the information process kernel executing instructions to process the data from the memory for transporting over the data network; wherein a number of view stations are coupled to the data network to receive the data for display thereon.

6. The remote video surveillance server of claim 5, wherein each of the channel interfaces units further comprises:

at least one channel transceiver chip;

at least one programmable device;

a processor, coupled to the at least one channel transceiver chip and the at least one programmable device and controlled under a clock signal, for synchronizing the at least one channel transceiver chip and the at least one programmable device to cause the data to be transferred into the memory and

read the data out of the memory onto a data bus when one of the view stations is controlled to display the data.

7. The remote video surveillance server of claim 6, wherein the data network is one or more of Ethernet (E1) and local area network (LAN).

8. The remote video surveillance server of claim 7, wherein the network interface formats the data for transmission over the data network in accordance with a standard supported by the data network.

9. The remote video surveillance server of claim 6, wherein the instructions when executed causes the processor to:

write the data to a PCI bus;

map an address on the PCI bus to an internal bus through an address mapping register; and

store the data in the memory when the internal bus is detected idle.

10. The remote video surveillance server of claim 9, wherein the instructions when executed causes the processor further to:

read the data out the memory when receiving a data channel number identifying the field terminal; and

transmit the data over the data network through the network interface.

11. The remote video surveillance server of claim 10, wherein the memory is a dual-ported random access memory.

12. The remote video surveillance server of claim 5, wherein the data represents audio and video signals from the field terminal.